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30 Counsel for Plaintiffs*

31 **UNITED STATES DISTRICT COURT
32 CENTRAL DISTRICT OF CALIFORNIA**

33 KEITH ANDREWS, an individual,
34 TIFFANI ANDREWS, an individual,
35 BACIU FAMILY LLC, a California
36 limited liability company, ROBERT
37 BOYDSTON, an individual, CAPTAIN
38 JACK'S SANTA BARBARA TOURS,
39 LLC, a California limited liability
40 company, MORGAN CASTAGNOLA, an
41 individual, THE EAGLE FLEET, LLC, a
42 California limited liability company,
43 ZACHARY FRAZIER, an individual,
44 MIKE GANDALL, an individual,
45 ALEXANDRA B. GEREMIA, as Trustee
46 for the Alexandra Geremia Family Trust
47 dated 8/5/1998, JIM GUELKER, an
48 individual, JACQUES HABRA, an
49 individual, ISURF, LLC, a California
50 limited liability company, MARK

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67 **Case No. 2:15-cv-04113-PSG-JEM**

68 [Consolidated with Case Nos. 2:15-CV-04573 PSG (JEMx), 2:15-CV-4759 PSG (JEMx), 2:15-CV-4989 PSG (JEMx), 2:15-CV-05118 PSG (JEMx), 2:15-CV-07051- PSG (JEMx)]

69 **DECLARATION OF RANDALL
70 BELL, PH.D., MAI IN SUPPORT
71 OF PLAINTIFFS' MOTION FOR
72 CLASS CERTIFICATION**

73 Date: November 7, 2016
74 Time: 1:30 p.m.
75 Courtroom: Hon. Philip S. Gutierrez

1 KIRKHART, an individual, MARY
2 KIRKHART, an individual, RICHARD
3 LILYGREN, an individual, HWA HONG
4 MUH, an individual, OCEAN ANGEL IV,
5 LLC, a California limited liability
6 company, PACIFIC RIM FISHERIES,
7 INC., a California corporation, SARAH
8 RATHBONE, an individual,
9 COMMUNITY SEAFOOD LLC, a
10 California limited liability company,
11 SANTA BARBARA UNI, INC., a
12 California corporation, SOUTHERN CAL
13 SEAFOOD, INC., a California
14 corporation, TRACTIDE MARINE
15 CORP., a California corporation, WEI
INTERNATIONAL TRADING INC., a
California corporation and STEPHEN
WILSON, an individual, individually and
on behalf of others similarly situated,

16 Plaintiffs,

17 v.

18 PLAINS ALL AMERICAN PIPELINE,
19 L.P., a Delaware limited partnership,
20 PLAINS PIPELINE, L.P., a Texas limited
21 partnership, and JOHN DOES 1 through
22 10,

23 Defendants.

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1 **DECLARATION OF RANDALL BELL, PHD, MAI.**

2 I, Randall Bell, PhD, MAI, declare as follows:

3 1. I was retained by Plaintiffs to quantify damages for property owners
4 and lessees impacted by the Plains Oil Spill. In this declaration, I describe, from an
5 appraisal perspective, how damages for such property owners and lessees can be
6 calculated. Specifically, I describe how, based on my experience and research for
7 this case, any harm to property owners and lessees can be quantified and why such
8 losses can be quantified through mass appraisal techniques. I have investigated a
9 number of factors in coming to my conclusions described below.

10 **BACKGROUND**

11 2. I am a real estate economist and a licensed appraiser. I also am a
12 certified general appraiser and a licensed real estate broker. I hold the professional
13 designation of MAI from the Appraisal Institute. A copy of my resume is attached.

14 3. I am a principal and the CEO of Landmark Research Group, LLC, a
15 consulting and appraisal firm that specializes in real estate damage economics –
16 located at: 496 Broadway, Laguna Beach, California 92651. Prior to this, I led the
17 national real estate damages practice at Bell Anderson & Sanders LLC, Price
18 Waterhouse and PricewaterhouseCoopers.

19 4. I have a PhD degree from Fielding Graduate University focusing on
20 socio-economics, an MBA degree with a real estate emphasis from UCLA and a BS
21 degree in finance and accounting from BYU.

22 5. I have over 25 years of experience in appraisal, consulting and
23 research regarding residential, land, commercial, special purpose, retail, industrial,
24 recreational and investment properties in several states, as well as internationally.

25 6. Since approximately 1992, I have specialized in real estate damage
26 economics, which includes valuation issues related to a variety of detrimental
27 conditions, including environmental issues, geotechnical issues, distress conditions,
28 construction defects, and natural disasters.

1 7. I am the author of the Appraisal Institute's course titled "The
2 Valuation of Detrimental Conditions in Real Estate" and I have taught the course on
3 dozens of occasions throughout the United States, Canada, South America and
4 Asia. This course specifically addresses the appropriate methodologies for valuing
5 properties that have been impacted with detrimental conditions, such as
6 environmental issues.

7 8. I am the author of numerous published articles related to the effect that
8 detrimental conditions have on real estate values.

9 9. I am the author of the book, "Real Estate Damages – 3rd Edition"
10 which is published by the Appraisal Institute. This book is widely regarded as the
11 authoritative text on determining the impacts, if any, that a detrimental condition
12 has on property values. Specifically, Chapter 1 addresses diminution in value
13 methodologies and Chapter 8 addresses environmental issues.

14 10. I have been retained in hundreds of diminution in value assignments,
15 including the World Trade Center, Hurricane Katrina and the Bikini Atoll Nuclear
16 Test Sites, respectively the largest terrorist, climate and environmental cases in
17 modern history.

18 11. Through my work, I also have become familiar with the beach-front
19 neighborhoods stretching from Refugio through Orange County.

20 12. This declaration discusses the investigations undertaken to date,
21 methodologies available and preliminary analysis performed, and sets forth how
22 damages to the property owners and lessees impacted by the Line 901 spill can be
23 calculated and whether such damages can be calculated on a subclass-wide basis
24 through, for example, mass appraisal techniques. This is based upon the
25 characteristics of the subject developments and standard real estate appraisal
26 methodologies. Further, this declaration addresses the ability of mass appraisal
27 techniques to measure any diminution in value suffered by the members of the
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subclass. Specific diminution in value calculations will be the subject of a future report.

13. The scope of work includes the following:

- Read various background and supporting documents.
- Research background data regarding the four class representative properties.
- Review various legal documents.
- Perform a literature review on water amenities and environmental conditions, as well as mass appraisal.
- Discuss the availability of market data with local real estate professionals.
- Collect and review preliminary market data.
- Personally inspect the subclass representatives' developments, the surrounding areas and comparable developments.
- Perform preliminary regression analyses in order to demonstrate such techniques.
- Review the Uniform Standards of Professional Appraisal Practice and other appraisal textbooks and articles related to mass appraisal techniques.
- Determine if mass appraisal techniques are appropriate given the relevant facts.
- Prepare an expert declaration.
- Mr. Michael Tachovsky assisted with subject property and market research. Mr. Tyler Baird assisted with subject property and market research. Mr. Michael Bell assisted with background research.

SUMMARY

14. Plains Oil Spill – Case Background: The Plains Oil Spill resulted in a spill of over 140,000 gallons of crude oil that was deposited on beaches from north of Refugio State Park to Santa Barbara and as far south as Orange County. This oil spill resulted in an effective loss of the amenities for which property owners and

1 lessees pay a premium to live on or near the ocean. This effective loss lasted while
2 those amenities were polluted with oil.

3 15. Subject Properties: The properties harmed by the Plains Oil Spill will
4 be determined based on information developed by Dr. Igor Mezić regarding where
5 and when the oil flowed after entering the ocean, other reports of oil from Line 901
6 in the ocean and washing onto beaches and properties, and my professional
7 assessment of the geographic scope of properties impacted by the oil in the ocean
8 and washing onto beaches and properties. The persons to be included in the real
9 property subclass are set forth in paragraph 30, below.

10 16. Water Feature Premiums: A review of the literature and market data
11 confirmed what is commonly known and self-evident. Property owners and tenants
12 routinely pay significant premiums for water amenities, such as beach frontage or
13 beach and ocean access.

14 17. Environmental Valuation: The Plains Oil Spill environmentally
15 damaged the beaches and oceans and effectively resulted in a loss of the amenities
16 for which numerous property owners and tenants pay a premium. A literature
17 review was conducted on the topic of environmental issues and their impact on real
18 estate values. Environmental valuation methodologies and the Uniform Standards
19 of Profession Appraisal Practice (USPAP) recognize that loss-of-use is an
20 appropriate method of calculating environmental damages.

21 18. Oil Spills: Oil that comes onto or nearby properties as a result of oil
22 spills can have a significant impact on owners' and lessees' enjoyment of their
23 properties. This has been well recognized in the appraisal and real estate
24 professions for years and has been reflected in the literature on the topic. In
25 particular, the severity of the impact of the BP oil spill on properties, resulted in a
26 number of published articles on this subject. These articles confirm what was
27 generally known – that oil on or around properties close to the beach significantly
28 impact the owners' and lessees' enjoyment of those properties, and the use and

1 values of such properties are diminished.

2 19. Mass Appraisal: USPAP recognizes that mass appraisal methodologies
3 are a proper method of valuing harm caused to large numbers of properties. Mass
4 appraisals are most often used for property tax computations and in cases, such as
5 this, where large numbers of properties incurred a damage that is relatively low, as
6 compared to their overall value.

7 20. Plains Oil Spill - Valuation Methodologies: All of the proposed
8 plaintiffs' properties are located on or near the California coastline, all are
9 residential properties or land, and all lost the effective use of the amenities for
10 which they pay a premium as a result of the Plains Oil Spill.

11 21. The method to determine damages for a proposed subclass in a case
12 like this is straight forward. The subject properties would enjoy valuable amenities,
13 but for the Plains Oil Spill. As a result of this spill, the subject properties effectively
14 lost those amenities for a period of time. The owners and lessees who paid a
15 premium for those amenities lost the value of that premium, and therefore were
16 damaged in the amount of the value of the premium.

17 22. The value of the premium paid for water amenities can be calculated
18 as the unimpaired rental rate of the subject property, less the rental rate of an
19 otherwise similar property without the beach proximity (i.e., a property that lacks
20 those amenities) – over the period where this amenity was effectively lost. Both
21 property inspections and the MLS data indicate that there is ample market data for
22 this analysis using simple regressions, multiple regressions or a paired-data
23 analysis.

24 23. I have conducted a preliminary analysis utilizing actual market data to
25 demonstrate the feasibility of this methodology. This type of paired-data analysis
26 can be performed in various neighborhoods and regions along the coast where oil
27 caused property owners and lessees to lose the value of the water premium. This
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damage figure would then be applied to the other similar homes in that area for the period during which they were harmed by the oil spill.

24. As a result of my research, personal inspections, literature review and analysis, the damage to the subject properties resulting from the Plains Oils Spill can be accurately calculated on a mass appraisal basis for the proposed subclass participants utilizing standard paired-data techniques. Indeed, there is ample market data such that this case is ideally suited for such a mass appraisal technique.

PLAINS OIL SPILL – CASE BACKGROUND

25. On May 19, 2015, a corroded section of a 10.6-mile oil pipeline, owned by Plains All American Pipeline, ruptured.¹ The pipeline rupture reportedly resulted in a spill of as many as 143,000 gallons of crude oil into the ocean and on nearby beaches.² The 24-inch oil line rupture, located on the mountain side of Highway 101 north of Refugio State Beach, sent oil through a culvert under the highway and railroad tracks, into the ocean, and onto beaches.³

26. Ultimately, the oil spill had far reaching impacts, including both economically and environmentally. California Governor Jerry Brown declared a state of emergency for Santa Barbara County the day following the spill.⁴ Cleanup

¹ Joseph Serna, "Refugio Oil Spill May Have Been Costlier, Bigger than Projected," *Los Angeles Times*, August 5, 2015, <http://www.latimes.com/local/lanow/la-me-ln-refugio-oil-spill-projected-company-says-20150805-story.html>.

² Joseph Serna, "Refugio Oil Spill May Have Been Costlier, Bigger than Projected," *Los Angeles Times*, August 5, 2015, <http://www.latimes.com/local/lanow/la-me-ln-refugio-oil-spill-projected-company-says-20150805-story.html>.

³ Lara Cooper and Giana Magnoli, "Cleanup Under Way for Large Oil Spill Near Refugio State Beach," *Noozhawk*, May 19, 2015, http://www.noozhawk.com/noozhawk/print/oil_spill_reported_on_coast_near_refugio.

⁴ Sam Frizell, "California Governor Declares State of Emergency After Santa Barbara Oil Spill," *Time*, May 20, 2015, <http://time.com/3891739/california-oil-spill-jerry-brown-state-of-emergency/>.

1 costs have totaled \$150 million thus far, and Plains is estimating that the
 2 environmental disaster would cost about \$269 million in its annual report.⁵ The
 3 spill led to the closure of fisheries and beaches, as well as the death of local
 4 wildlife.⁶ Cleanup crews have responded to reports of tar balls as far away as
 5 Orange County, and one tar ball recovered in Manhattan Beach had the same oil
 6 “DNA” as the oil spilled at Refugio.⁷ The Plains rupture was the largest coastal oil
 7 spill since BP's Deepwater Horizon explosion in the Gulf of Mexico six years ago.⁸

8 27. Below are pictures from the spill. Additional pictures are included in
 9 Exhibit 8.

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18 ⁵ Alex Kacik, “Plains Arraignment, Motion to Seal Indictment Transcripts
 19 Continued to July 28,” *Pacific Coast Business Times*, June 30, 2016,
 20 <http://www.pacbizztimes.com/2016/06/30/plains-arraignment-motion-to-seal-indictment-transcripts-continued-to-july-28/>.

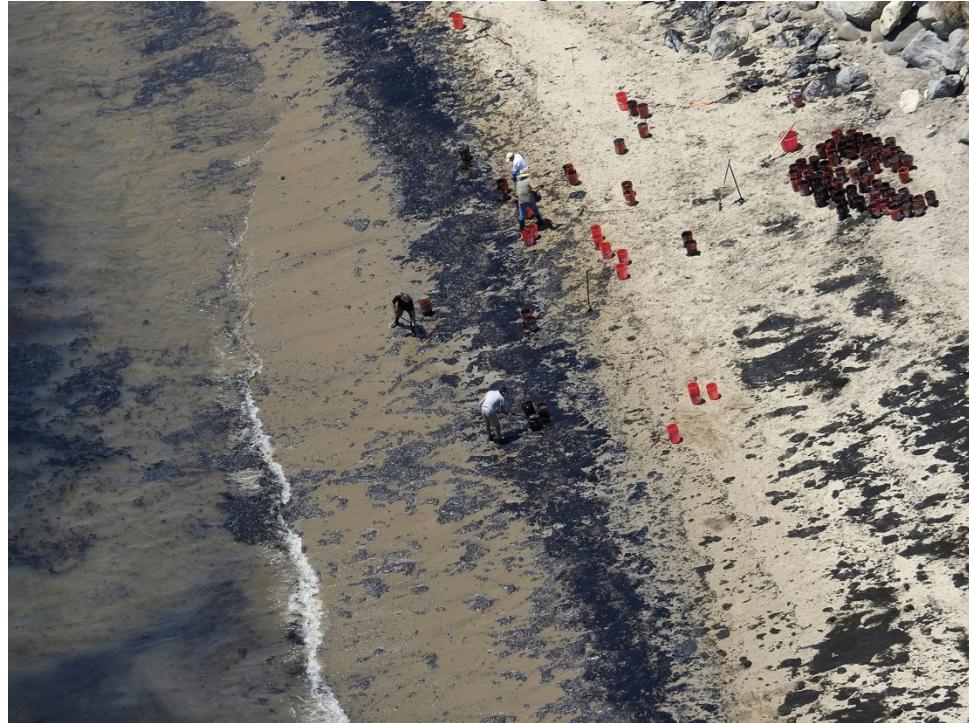
21 ⁶ Samantha Page, “Oil Company to Face Felony Charges Over Massive California
 22 Spill,” *Think Progress*, May 18, 2016,
 23 <http://thinkprogress.org/climate/2016/05/18/3779335/santa-barbara-oil-spill-indictment/>.

24 ⁷ Javier Panzar, Joseph Serna, and Matt Hamilton, “Big Oil Slick off Santa Barbara
 25 County Coast Sparks New Concerns,” *Los Angeles Times*, July 29, 2015,
 26 <http://www.latimes.com/local/lanow/la-me-ln-oil-slick-santa-barbara-county-20150729-story.html>.

27 ⁸ Brian Melley, “Company Charged in Oil Spill that Fouled California Beaches,”
 28 *Phys.org*, May 17, 2016, <http://phys.org/news/2016-05-pipeline-firm-california-oil.html>.



Workers Conducting Clean-Up⁹



Arial View of Oil Stained Beaches and Clean-Up¹⁰

⁹Ibid

¹⁰Ibid



Beaches Damaged by Plains Oil Spill¹¹



Park Closure Due to Plains Oil Spill¹²

¹¹ Lara Cooper and Giana Magnoli, "Cleanup Under Way for Large Oil Spill Near Refugio State Beach," *Noozhawk*, May 19, 2015, http://www.noozhawk.com/noozhawk/print/oil_spill_reported_on_coast_near_refugio.

¹² Alejandro Lazo and Erin Ailworth, "Pipeline in California Oil Spill Ordered Shut Down, Tested," *Wall Street Journal*, May 22, 2015,

SUBJECT PROPERTIES

28. The property owner and lessee subclass representatives and their respective subject properties are:

- Mark & Mary Kirkhart, 1520 Miramar Beach, Santa Barbara, California 93108 (APN 009-345-013)
- Jacques Habra, 3425 Sea Ledge Lane, Santa Barbara, California 93109 (APN 047-082-012)
- Alexandra Geremia, 9 Arroyo Quemada Lane, Goleta, California 93117 (APN: 081-190-003)
- Baciu Family LLC, vacant land at Arroyo Hondo, Goleta (APN 081-160-001-2; 081-170-001,3; 081-180-001-3, 6)

29. For purposes of preparing this declaration, I personally inspected the oil spill site, the exteriors of the above-listed properties, and the surrounding areas. I also am generally familiar with the beach-front neighborhoods stretching from Refugio through Orange County.

30. The persons to be included in the real property subclass are owners or lessees of: (1) beachfront properties on a beach which oil from the Line 901 spill washed up onto or nearby the shoreline; (2) properties with a private easement to a beach which oil from the Line 901 spill washed up onto or nearby the shoreline; (3) properties in ocean-oriented communities that are within one-half ($\frac{1}{2}$) mile of a beach which oil from the Line 901 spill washed up onto or nearby the shoreline; and (4) such properties whose associated beach, based on media reports and broker feedback, was threatened with having oil from the Line 901 spill wash up onto or nearby the shoreline.

<http://www.wsj.com/articles/pipeline-in-california-oil-spill-ordered-shut-down-tested-1432319020>.

1 31. The specific property owners/lessees harmed by the Line 901 spill will
2 be determined by applying the above parameters to the final analysis developed by
3 Dr. Igor Mezić regarding where and when the oil flowed after entering the ocean,
4 along with other relevant reports relating to the Line 901 spill, and interviews of
5 brokers or other relevant people. Based on current information, including Dr.
6 Mezić's preliminary analysis, the properties that the above parameters will be
7 applied to are located from West Longitude 120.4 on the West, to West Longitude
8 118.6 on the East (i.e., approximately from Point Conception to the eastern border
9 of Malibu). These geographic boundaries may change based on Dr. Mezić's final
10 analysis and any additional pertinent information I rely on in my final report.

11 32. Pictures of the spill site and the subclass representatives' properties
12 follow.

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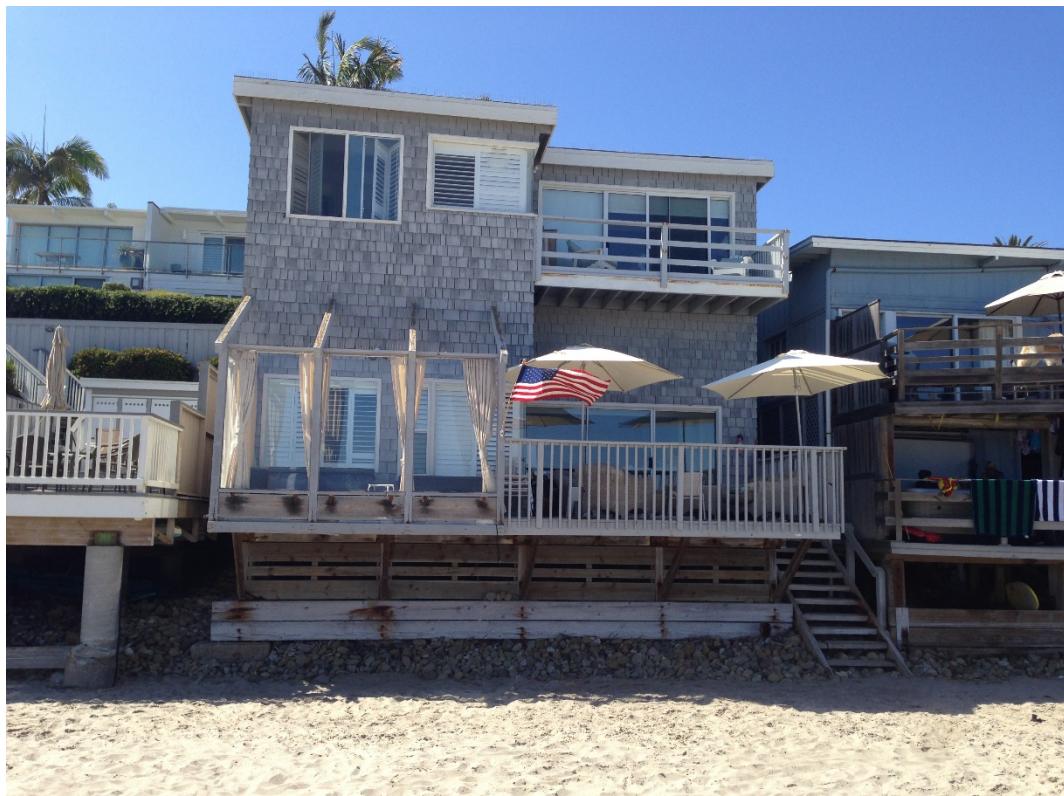
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View of the spill location site



View of the subject property located at 1520 Miramar Beach, Santa Barbara



View of the subject property located at 3425 Sea Ledge Lane, Santa Barbara



View of the subject property located at 9 Arroyo Quemada Lane, Goleta



View of subject property land located at Arroyo Hondo, Goleta

WATER FEATURE PREMIUMS

34. It is commonly known in the real estate and appraisal professions that proximity to water features (ocean, lake and river) increase property values and rental rates. The published literature that speaks directly to water proximity concludes that property values increase as access to water amenities increases.

35. A summary of published literature is included as Exhibit 9.

VALUING ENVIRONMENTAL DAMAGES

36. The Plains Oil Spill environmentally damaged the beaches and oceans and effectively resulted in a loss of the ocean amenities for which numerous property owners and tenants pay a premium.

37. A literature review of valuing environmental damages is found in Exhibit 10. The fundamental framework for valuing such a loss-of-use, as well as nearly any other any real estate damage allegation, is set forth in the Detrimental Conditions Matrix. This matrix was first published in 1998, and is the basis for fundamental changes of the Uniform Standards of Professional Appraisal Practice (USPAP) that were published in 2002 and made effective January 1, 2003.

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Detrimental Conditions Matrix

	Assessment	Repair	Ongoing
Cost	Cost & Responsibility To Assess Damage	Cost & Responsibility To Repair or Remediate	Ongoing Costs & Responsibility i.e., monitoring
Use	Impact on Use While Assessed	Impact on Use While Repaired or Remediated	Ongoing Impact on Use or Impact on Highest & Best Use
Risk	Uncertainty Factor	Project Incentive	Market Resistance

38. Advisory Opinion 9 of USPAP describes the “cost, use and risk” elements, with emphasis added, as follows:

Satisfying SR 1-4 Requirements:

When the appraiser addresses the diminution in value of a contaminated property and/or its unimpaired value, the appraiser must recognize that the value of an interest in impacted or contaminated real estate may not be measurable simply by deducting the remediation or compliance cost estimate from the opinion of the value as if unaffected (unimpaired value). Rather, cost, use and risk effects can potentially impact the value of contaminated property. Cost effects primarily represent deductions for costs to remediate a contaminated property. These costs are usually estimated by someone other than the appraiser, and should include consideration of any increased operating costs due to property remediation. The appraiser should also be aware that the market might not recognize all estimated costs as having an effect on value. **Use effects reflect impacts on the utility of the site as a result of the contamination. If the contamination and/or its cleanup rendered a portion of the site unusable, or limited the future highest and best use of the property, then there could be a use effect on value.** Risk effects are typically estimated by the appraiser and often represent the most challenging part of the appraisal assignment. These effects are derived

1 from the market's perception of increased environmental
2 risk and uncertainty. The analysis of the effects of
3 increased environmental risk and uncertainty on property
4 value (environmental stigma) must be based on market
5 data, rather than unsupported opinion or judgment.

6 In general, the unimpaired value of the property being
7 appraised can be estimated using sales comparison
8 approach (SR 1-4(a)), cost approach (SR 1-4(b)), and
9 income approach (SR 1-4(c)). Estimating the effects of
10 environmental contamination on real property value
11 usually involves the application of one or more
12 specialized valuation methods. These methods should be
13 consistent with the requirements related to the valuation
14 approaches in USPAP.

15 39. While the nine quadrants within the matrix may not all be applicable,
16 they should all be considered in the context of every assignment. While cost, use
17 and risk have all been considered, the use effects are central to this case.

18 40. Sales prices and rental rates consider the entire value of the property
19 including the use of associated amenities. When environmental damages do not
20 completely destroy the use of the property (e.g., owners and lessees still have the
21 utility of the house itself), they still deprive the owners or lessees of part of what
22 they paid for. In this case, the reasonable use of the valuable ocean amenity has
23 been eliminated for a period of time due to the oil spill.

24 41. In the context of the DC Matrix and USPAP AO-9, rental rates are
25 regularly utilized in determining loss of use calculations. Rental rates are
26 appropriate for calculating the lost value of the water premium as they reflect the
27 real estate markets perception of value for the use of a property over a specific
28 period of time. Furthermore, USPAP makes clear that the "use" component should
be considered in such an analysis, and the literature is clear the rental rates provide
an appropriate measure of such use, or loss of use. Rental rates of properties with
ocean frontage or proximity can be compared with the rental rates of otherwise
similar properties that do not have ocean frontage or proximity. This is a standard

1 paired-data analysis, and the differential reflects the damage caused to the subclass
2 properties.

3 42. This differential in rental rates can be converted to a rental rate per
4 square foot, which can then be applied to the subclass member's properties.

5 **THE IMPACT OF OIL SPILLS ON PROPERTIES**

6 43. Oil that comes onto or nearby properties as a result of oil spills can
7 have a significant impact on owners' and lessees' enjoyment of the property. This
8 has been well recognized in the appraisal and real estate professions for years and
9 has been reflected in the literature on the topic. In particular, the severity of the
10 impact of the BP oil spill on properties resulted in a number of published articles on
11 this subject. These articles confirm what was generally known – that oil on or
12 around properties close to the beach significantly impacts the owners' and lessees'
13 enjoyment of those properties, and the use and values of such properties are
14 diminished.

15 44. A summary of relevant literature from the BP oil spill is included as
16 Exhibit 11.

17 **USE OF MASS APPRAISAL**

18 45. Mass valuations of real estate have been established in the mainstream
19 of the appraisal profession since at least the 1950's and 60's.¹³

20 46. Mass appraisal is defined by the Dictionary of Real Estate (5th
21 Edition) as, "The process of valuing a universe of properties as of a given date
22 using standard methodology, employing common data, and allowing for statistical
23 testing (USPAP, 2010-11 ed.)."

24 47. Mass appraisal methodologies rely on statistical tools to estimate
25 values of properties in an appropriate subclass geographic area. The valuation
26 methodologies employed in this approach should be in conformance with Appraisal

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¹³ Robert A. Blettner, "Mass Appraisal via Multiple Regression," *The Appraisal
Journal* (1969): 513-521.
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1 Foundation, USPAP Standard 6, and the Standard on Mass Appraisal of Real
2 Property promulgated by the International Association of Assessing Officers.

3 48. The mass appraisal methodologies often include regression models or
4 studies. There are two basic types of regression models, simple regressions (that use
5 one independent variable) and multiple regressions (that use multiple independent
6 variables), which are also called hedonic models. On the other hand, dependent
7 variables are typically price, (including price per square foot, price per acre, price
8 per unit). The dependent variable of price “depends” upon the independent
9 variables. Independent variable can include features such as square footage, lot size,
10 age, room counts, as well as pools, views or other amenities.

11 49. In the context of real estate damage economics, regressions often
12 compare multiple neighborhoods. The subject neighborhood being studied is
13 conventionally called the “test” area, while the comparable neighborhoods are
14 called “control” areas.

15 50. Simple linear regression models may be utilized as trend studies.
16 These are often “time-value” models where a single independent variable “time” is
17 graphed on the “x-axis” and the dependent variable “value” is graphed on the “y-
18 axis.”

19 51. Multiple regression techniques use multiple independent variables. As
20 they are multi-dimensional, they cannot be graphed. Instead they use statistical
21 tables; specifically, these are (1) summary input tables, (2) descriptive statistic
22 tables, (3) residual tables, and (4) descriptive ANOVA tables.

23 52. The positive attributes of simple regressions is that they are
24 presentation friendly and can facilitate studying several test and control
25 neighborhoods. They can also facilitate time, price and square footage, which is
26 often the predominant independent variable as a dependent variable of price-per-
27 square-foot. They can also generate linear (straight line) and curvilinear or

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1 polynomial (curved line) outputs. As a drawback, simple regressions use only one
2 independent variable.

3 53. Multiple regressions use multiple independent variables. In other
4 words, they specifically account for variables such as a property's size, room
5 counts, age, condition and amenities (pool, spa, view, etc.)

6 54. Multiple regressions not only accommodate multiple independent
7 variables, but they can facilitate studying several test and control neighborhoods.
8 Furthermore, a significant advantage of mass appraisal techniques in that
9 regressions are premised upon the concept of central tendency, where the data
10 groups or clusters around a central trend line.

11 55. The phrase 'central tendency' was first used in the late 1920s. The
12 tendency of quantitative data, for homogeneous market data such as ocean-oriented
13 housing, is to cluster around some central value. The central value is commonly
14 estimated by the mean, median, or mode, whereas the closeness with which the
15 values surround the central value is commonly quantified using the standard
16 deviation or variance.

17 56. Measures of central tendency, or what are commonly called averages,
18 answer the question, "Is there a single number that best represents the variable in
19 question?" With ocean-oriented residential properties, a mass appraisal technique is
20 not only efficient, but also appropriate and advantageous. Independent variables, as
21 addressed, account for the independent variables and can be reliably calculated.
22 Thus, all subclass properties, including those in pockets with more limited market
23 data, can benefit from the large amounts of data and the study as a whole.

24 57. Exhibit 12 contains a chart setting forth an illustration of simple and
25 multiple regressions.

26 ///

27 ///

28 ///

APPLICATION TO THE PLAINS OIL SPILL

58. When an oil spill fouls the ocean and beaches, the local residents lose the full use of their property for which they paid a significant premium. The well-established valuation models previously described allow me to reasonably calculate the value of that lost premium.

59. As discussed, mass appraisal techniques are well suited to measure any diminution in value resulting from environmental issues. USPAP Standard 6 sets forth mass appraisal as an accepted methodology. The professional literature provides further support for the use of mass appraisal techniques. Indeed, mass appraisal and regression techniques are relatively common within the appraisal profession.

60. A valid mass appraisal should encompass similar property types, the source(s) of contamination, and market conditions. With reasonable similarities in the properties, market and environmental characteristics, property interest defined in a class action can be meaningfully analyzed.¹⁴ The real estate damages in this case are well suited for mass appraisal, as properties along the impacted coastline have similar uses, market areas, environmental damages, and cleanup timeframe. The subject properties are all ocean-oriented residential properties (or land). From all perspectives, the subject properties and potential subclass areas are well-suited for mass appraisal methodologies.

61. Based on the USPAP standards and literature described in the prior sections, I can reliably assess the damages suffered by those property owners and lessees through a rental analysis. The monthly market rental rates can be divided by the square footage of the home, which yields a rental rate per square foot. By subtracting this rental rate per square foot of the ocean-oriented properties from

¹⁴ Thomas O. Jackson, "Real Property Valuation Issues in Environmental Class Actions," *The Appraisal Journal* (2010): 141-149.

1 otherwise similar non-ocean oriented properties, the incremental value attributed to
2 the ocean proximity can be derived.

3 62. The properties harmed by the Plains Oil Spill will be determined based
4 on information developed by Dr. Igor Mezić regarding where and when the oil
5 flowed after entering the ocean, other reports of oil from Line 901 in the ocean and
6 washing onto beaches and properties, and my professional assessment of the
7 geographic scope of properties impacted by the oil in the ocean and washing onto
8 beaches and properties.

9 63. Field inspections of the subclass representatives' developments and
10 comparable developments confirmed that the potential subclass representatives'
11 developments have uniform residential property characteristics and there is ample
12 comparable market data.

13 64. During the property inspections, it was noted that all of the properties
14 are located on or near the California coastline, all of the properties are residential
15 properties or land, and all lost the reasonable use of the beach as a result of the
16 Plains Oil Spill. As owners of properties with ocean proximity routinely pay
17 significant premiums for this amenity, an oil spill would obviously interfere with a
18 reasonable use of these natural resources.

19 65. As described above, rental rates are the proper basis for performing
20 loss of use calculations. Further, because the oil spill was cleaned up over a period
21 of time, it is further clear that the loss of use and applicable rental rates should
22 utilized in computing any damages.¹⁵

23 66. Both property inspections, along with MLS data and public records,
24 indicate that there is ample market data for this analysis. The approach is essentially
25 an income approach both in terms of a rental survey and the calculations for loss of
26

27 ¹⁵ Scott B. Arens, "The Valuation of Defective Properties: A Common Sense
28 Approach," *The Appraisal Journal* (1997): 143-148.

1 use over time. Furthermore, it utilizes a paired-rental analysis (similar to a paired-
2 sales analysis) to measure the incremental value of the ocean frontage or proximity.

3 67. I have performed similar regression analyses numerous times. For
4 example I have conducted statistical regressions involving contaminated real estate
5 in multiple markets including California, Nevada, Florida, Missouri, Michigan,
6 Idaho, the Bahamas and the Marshall Islands.

7 68. Based upon the foregoing, the method to determine damages for a
8 proposed subclass in this case straight forward. The subject properties would enjoy
9 valuable amenities, but for the Plains Oil Spill. As a result of this spill, the subject
10 properties effectively lost those amenities for a period of time. The period of
11 damage will be calculated during the period that the oil spill effectively caused
12 property owners or lessees to lose the reasonable use of their water amenities. This
13 analysis considers past damages and is therefore retrospective. The following
14 demonstrates how the analysis can be completed once all the underlying facts are
15 known:

16 **Step 1 - Determine the Specific Subclass Area:** As described previously,
17 the properties harmed by the Plains Oil Spill will be determined based on
18 information developed by Dr. Igor Mezić regarding where and when the oil
19 flowed after entering the ocean, other reports of oil from Line 901 in the
20 ocean and washing onto beaches and properties, and my professional
21 assessment of the geographic scope of properties impacted by the oil in the
22 ocean and on beaches.

23
24 **Step 2 – Identify Relevant Property Characteristics:** The relevant
25 property characteristics (location, square footage, age, lot size, room counts,
26 garage, amenities, etc.) will be noted for all properties in the mass appraisal.
27 Additionally, each property will be coded in terms of, (1) ocean-front, (2)
28 ocean private easement, (C) ocean close, or (D) ocean community (but not in

1 close proximity). All market data will be entered into an Excel spreadsheet.
2 The following diagram sets for these parameters for the study:

	A Ocean Proximity < 0.5 Mile		B Ocean Proximity > 0.75 Mile
1	Ocean Front	vs.	Ocean Community
2	Ocean Private Easement	vs.	Ocean Community
3	Ocean Close	vs.	Ocean Community

14
15 **Step 3 - Rental Transactions within the Subclass or “Test” Area:** This
16 step involves the research of rental data, which is obtained from the local
17 MLS services and cross-referenced with public records. Each rental
18 comparable will also be similarly coded.

19
20 **Step 4 - Rental Transactions in the Non-Subclass or “Control” Areas:**

21 The control areas include properties not located near the beach (at least 0.75
22 miles away), but that are otherwise similar to the homes located within the
23 subclass.

24 To illustrate this process, a paired-data analysis simply compares home rental
25 rates with and without the beach proximity amenities that were effectively
26 lost for a period of time:

27 ///

28 ///

1	Rental rate of house with beach proximity,	
2	2,000 SqFt @ \$7,000/Month	\$3.50/SqFt/Month
3		
4	Less:	
5		
6	Rental rate of house without beach proximity ¹⁶	
7	2,000 SqFt @ \$4,000/Month	\$2.00/SqFt/Month
8		
9	Incremental Loss of Use	\$1.50/SqFt/Month
10		

11 **Step 5 - Simple Regression Analysis:** A simple regression provides a graph
12 that generates a trend line based upon the rental rate per square foot, over
13 time. This graph can then be utilized to examine the quality of the data and
14 identify any outlying market data that requires additional verification or
15 analysis.

16
17 **Step 6 - Multiple Regression Analysis:** As discussed, a multiple regression
18 is a mass appraisal technique that mathematically accounts and adjusts for
19 multiple independent variables within the data set, such as location, square
20 footage, age, lot size, room counts, garage, amenities, etc. Ultimately, the
21 multiple regression will produce the incremental rental rate which reflects the
22 loss of use for ocean proximity for each subclass property. Essentially a
23 multiple regression is making a calculation similar to this for each subclass
24 property, in order to determine the damages applicable for each property:
25
26

27

¹⁶ Note that the paired data is of an otherwise similar home in terms of size and age,
28 and located in the same general location greater than 0.75 mile from the ocean.

1 Subclass Property SqFt X Incremental Use Loss/Month X Months of Lost
2 Use = Damage

3
4 For example,

5
6 2,500 SqFt X \$1.50/Month Loss of Use X 2.5 Months of Lost Use =
7 \$9,375 Damage

8
9 69. I conducted a preliminary analysis utilizing Santa Barbara market data.
10 This preliminary analysis demonstrates the fundamental calculations and the
11 availability of market data. In each of these calculations, rental properties located
12 within half a mile from the beach (beachfront or accessible) are compared with
13 otherwise similar properties located over three-quarters of a mile away from the
14 beach (ocean community). All of the analyses were completed on a “rental rate per
15 square foot basis” with a final “damage per month” being calculated, also on a “per
16 square foot basis.”

17 70. This type of paired-data analysis can be completed in various
18 neighborhoods and regions along the coast where oil soiled the beaches. This
19 damage figure would then be applied to the other similar homes in that area using
20 both simple and multiple regressions. There is abundant and reliable market data. In
21 a full analysis, this data could be utilized to determine damages for those residences
22 in the subclass area, by multiplying the damage per month, with the square footage
23 of the subclass member, by the period of time the damage occurred.

24 71. Four sets of data were researched; (1) beach-front homes that had
25 rented, (2) homes with private easements to the beach that had rented, (3) homes in
26 close proximity (less than half a mile) to the beach that had rented, and (4) homes
27 that are otherwise similar to the prior homes, but are not located in proximity to the
28 beach. All data was derived from the Santa Barbara Multiple Listing Service

(MLS). The results of the three preliminary comparisons, and brief descriptions, are as follows:

Ocean Front v. Ocean Community

No	Item	Rental Rate	SqFt	Rental Rate/SqFt	Source
1	Beach-Front House Rental Rate Per Month	\$15,000	2,800	\$5.36	Multiple Listing Service (MLS)
2	Local Inland House Rental Rate Per Month	\$3,200	2,273	\$1.41	Multiple Listing Service (MLS)
3	Damage Per Month			\$3.95	Calculation

Ocean Private Easement v. Ocean Community

No	Item	Rental Rate	SqFt	Rental Rate/SqFt	Source
1	Ocean Private Easement House Rental Rate Per Month	\$7,500	2,567	\$2.92	Multiple Listing Service (MLS)
2	Local Inland House Rental Rate Per Month	\$3,200	2,273	\$1.41	Multiple Listing Service (MLS)
3	Damage Per Month			\$1.51	Calculation

Ocean Close v. Ocean Community

No	Item	Rental Rate	SqFt	Rental Rate/SqFt	Source
1	Ocean Close House Rental Rate Per Month	\$5,800	2,155	\$2.69	Multiple Listing Service (MLS)
2	Local Inland House Rental Rate Per Month	\$4,500	2,521	\$1.79	Multiple Listing Service (MLS)
3	Damage Per Month			\$0.91	Calculation

1 72. This data can then be applied to measure the damage incurred by each
2 subclass member. For example, if a subclass member has a residence containing
3 2,200 square feet with a private easement to the beach, and the time of ocean
4 impairment is two months, the total damages can be determined as follows:

8 73. This research and example demonstrates the application of an analysis
9 using market rental data. Similar calculations, refined through regression analysis,
10 can then be applied to properties within the subclass to determine the damages for
11 each property. The full quantification of real estate damages will be the subject of a
12 future report.

13 I declare under penalty of perjury under the laws of the State of California
14 that the foregoing is true and correct.

16 Executed on August 18, 2016, at LAGUNA BEACH, CA.


Randall Bell, PhD, MAI

CERTIFICATE OF SERVICE

I, Robert J. Nelson, hereby certify that on August 22, 2016, I electronically filed Plaintiffs' **DECLARATION OF RANDALL BELL, PHD MAI IN SUPPORT OF PLAINTIFFS' MOTION FOR CLASS CERTIFICATION** with the Clerk of the United States District Court for the Central District of California using the CM/ECF system, which shall send electronic notification to all counsel of record.

/s/ Robert J. Nelson
Robert J. Nelson